

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for re-establishing an IP protocol call signaling channel, comprising:

establishing a first call signaling channel between a first communication endpoint and a first gatekeeper, wherein said first call signaling channel provides a first set of call signaling feature with respect to a first bearer channel;

in response to losing said established first call signaling channel, sending a keep alive message to a second gatekeeper;

if no response to the keep alive message is received, determining if a registration rejection message is received;

if a registration rejection message is received, restarting the registration process;

if no registration rejection message is received, sending a keep alive message to a next gatekeeper; and

in response to receiving a registration confirmation message from said second gatekeeper in reply to said keep alive message, establishing a second call signaling channel with said second gatekeeper without restarting registration of the first communication endpoint, wherein said second call signaling channel provides said second set of signaling features with respect to said first bearer channel and effectively re-establishes said first call signaling channel.

2. (Previously Presented) The method of Claim 1, wherein said keep alive message comprises a lightweight registration request.

3. (Previously Presented) The method of Claim 1, wherein said step of sending a keep alive message to a second gatekeeper in response to losing said established first call signaling channel comprises sending a keep alive message to a plurality of alternate gatekeepers, and wherein said step of establishing a second call signaling channel comprises establishing a call signaling channel with a one of said alternate gatekeepers.

4. (Previously Presented) The method of Claim 1, further comprising:
in response to receiving no registration confirmation message from said second gatekeeper within a first time period, re-registering with a gatekeeper.
5. (Previously Presented) The method of Claim 1, further comprising establishing a bearer channel between said first communication endpoint and a second communication endpoint, wherein said call signaling channel carries data related to at least one of control of and features associated with data transferred between said first and second communication endpoints by said bearer channel.
6. (Previously Presented) The method of Claim 1, wherein said first communication endpoint comprises a telephony device.
7. (Previously Presented) The method of Claim 1, wherein said call signaling channel is established according to an ITU-T H.323 protocol.
8. (Currently Amended) A communication system, comprising:
a first communication endpoint, operable to at least one of receive data from and provide data to an Internet protocol network;
a first gatekeeper, operable to control aspects of operation of a communication endpoint in communication with said first gatekeeper;
a first communication link between said first communication endpoint and said first gatekeeper, wherein said first communication link provides a first call signaling channel in support of a first realtime communication;
a second gatekeeper, operable to control aspects of operation of a communication endpoint in communication with said second gatekeeper; and
a second communication link between said first communication endpoint and said second communication gatekeeper, wherein said second communication link is established after said first communication link is lost and after an exchange of a lightweight RRQ message and an RCF message between said first communication endpoint and said second communication gatekeeper without restarting registration of the first communication endpoint with the second

gatekeeper, wherein said second communication link provides a second call signaling channel that replaces said first call signaling channel, wherein said first realtime communication formerly supported by said first call signaling channel is supported by said second call signaling channel after said first communication link is lost.

9. (Currently Amended) The communication system of Claim 8, further comprising:
a second communication endpoint; and
a third communication link, wherein said third communication link is established
between said first and second communication endpoints.

10. (Currently Amended) The communication system of Claim 8, wherein said first communication endpoint comprises a telephony device.

11. (Currently Amended) The communication system of Claim 10, wherein said telephony device comprises at least one of an IP telephone, a soft telephone, a videophone, and a soft videophone.

12. (Currently Amended) The communication system of claim 8, wherein said first communication endpoint comprises a gateway.

13. (Currently Amended) The communication system of Claim 8, wherein said first communication endpoint comprises a first gateway and at least a first telephony device interconnected to said gateway.

14. (Currently Amended) The communication system of Claim 8, wherein said first communication endpoint comprises memory operable to store an address of said second communication gatekeeper.

15. (Currently Amended) A ~~computer-readable-medium-product of manufacture~~
encoded with a computer program for performing a method, the method comprising:

registering an endpoint with a first gateway, wherein a first signaling link that supports a first bearer channel comprising a realtime communication is established between said endpoint and said first gateway;

in response to a loss of said first signaling link, sending a lightweight registration request (RRQ) message to a second gateway; and

if no response (RCF) to the keep alive message is received, determining if a registration rejection message (RRJ) is received; and

if a registration rejection message (RRJ) is received, restarting the registration process;

if no registration rejection (RRJ) message is received, sending a keep alive message (RRQ) to a next gatekeeper;

in response to receiving a RCF ~~registration confirmation~~ message from said second gateway, establishing a second signaling link between said endpoint and said second gateway, wherein said second signaling link supports said first bearer channel comprising a realtime communication.

16. Cancelled

17. (Previously Presented) The method of Claim 15, further comprising:
in response to receiving a registration rejection message, sending a lightweight RRQ message to a third gateway.

18. (Previously Presented) The method of Claim 15, further comprising:
sending a lightweight RRQ message to a third gateway.

19. Cancelled

20. (Previously Presented) The method of Claim 15, wherein said computational component comprises a logic circuit.

21. (Currently Amended) A communication system endpoint, comprising:

means for communicating with a first means for controlling aspects of an exchange of data between said communication system endpoint and a second communication system endpoint, wherein a first call signaling channel in support of a first realtime communication over a first bearer channel is established;

means for generating a lightweight RRQ message in response to a loss of a communication link between said means for communicating and said first means for controlling aspects of an exchange of data between said communication system endpoint;

if no response to the lightweight RRQ message is received, means for determining if a RRJ message is received; and

if a RRJ message is received, means for restarting the registration process;

if no RRJ message is received, means for sending a lightweight RRQ message to a next gatekeeper; and

if a RCF response is received, means for interconnecting said at least a first communication endpoint means and said first means for controlling aspects of an exchange of data between said communication system endpoint, without restarting the registration process.

22. (Previously Presented) The communication system endpoint of Claim 21, further comprising:

means for storing a list of alternate means for controlling aspects of an exchange of data between said communication system endpoint and a second communication system endpoint, wherein said means for generating a lightweight RRQ message addresses said lightweight RRQ message to a start of said alternate means for controlling, wherein a second call signaling channel in support of said first realtime communication over a first bearer channel is established.

23. (Currently Amended) The communication system endpoint of Claim 21, further comprising:

means for storing a list of alternate means for controlling aspects of an exchange of data between said communication system endpoint and a second communication system endpoint, wherein said means for generating a lightweight RRQ message addresses a lightweight RRQ message to a plurality of said alternate means for controlling.